

# PowerPro

## Inverter Generators

### Owners Manual

### IGR6000H



#### MMD Equipment

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# Table of Contents

Introduction .....3

1. Safety Instructions .....5

2. Component Locations.....7

3. Pre-Operation Check.....10

4. Starting The Engine .....14

5. Generator Use .....17

6. Stopping The Engine .....26

7. Maintenance .....27

8. Transporting and Storage .....34

9. Wheel Kit .....36

10. Troubleshooting.....37

11. Specifications .....38

12. Warranty.....39

13. Emission Control System.....40

# Introduction

Thank you for purchasing an MMD PowerPro Inverter Generator! We are happy that you have chosen our product for all your portable energy needs.

This user manual covers the IGR6000H generator with EPA and California Air Resources (CARB) certification if do designated.

We strive to provide the best products, and in those efforts, we are constantly making improvements. The information in this manual is based on the most recent information available at time of print. You can always find the latest information, parts, and accessories on our website.

We recommend reading this manual thoroughly before use to prevent any damage to the product or personal injury.

This manual should always be kept with the generator and should remain with generator if resold.

## Reference

For your reference, please record the model, serial number (see page 9), sales representative, and date of purchase.

Model: \_\_\_\_\_

Serial: \_\_\_\_\_

Sales Representative and date of purchase: \_\_\_\_\_

Our generators are designed to provide safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the generator. Failure to do so could result in personal injury or equipment damage.

If a problem should arise, or if you have any questions about the generator, consult an authorized sales representative, or MMD Equipment at: [mmdequipment.com/tech-support.html](http://mmdequipment.com/tech-support.html)



*Scan for MMD  
technical support*

## ⚠ **WARNING**

Failure to properly follow these precautions can result in property damage, serious injury or DEATH!

Read all labels and the owner's manual before operating this generator.

Generators produce carbon monoxide, a poisonous, colorless, odorless gas that can cause death or serious injury.

Indoor use of a generator CAN KILL QUICKLY. Generators should be used outdoors only.

Generators should be used outdoors only and away from garages and open windows and protected from rain and snow.

Check for spilled fuel or leaks. Clean and/or repair before use.

Always stop engine before refueling. Wait 5 minutes before restarting.

Keep any source of ignition away from fuel tank at all times.

The portable generator is not meant to be used as a permanent back-up power system for the home.

## ⚠ **WARNING**

Indicates a strong possibility of severe personal injury or death if instructions are not followed.

## ⚠ **CAUTION**

Indicates a possibility of personal injury or equipment damage if instructions are not followed.

## ⚠ **NOTE**

Provides helpful information.

# 1. Safety Instructions

## ⚠ **WARNING**



**This generator is designed to provide safe and dependable service if operated according to instructions.**

- Read and understand the Owner's Manual before operating the generator. Failure to do so could result in personal injury or equipment damage.

## ⚠ **WARNING**



**Exhaust gas contains poisonous carbon monoxide. Never run the generator in an enclosed area.**

- Be sure to provide adequate ventilation.

## ⚠ **WARNING**



**Do not touch muffler while it is hot.**

- The muffler becomes very hot during operation and remains hot for several minutes after stopping the engine.

**Let the engine cool before storing the generator indoors.**

- The engine exhaust system will be heated during operation and remain hot immediately after stopping the engine.
- Pay attention to the warning marks attached to the generator to prevent burns or serious injury.

## ⚠ **WARNING**

**Gasoline is extremely flammable and explosive under certain conditions.**

- Always refuel in a well ventilated area with the engine stopped.
- Keep away from smoking materials, sparks, and other sources of combustion when refueling the generator.
- Clean up spilled gasoline immediately.
- Restrict operation of generator in high-risk fire causing areas.

## ▲ WARNING



Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage, and when utility power is restored, the generator may explode, burn, or cause fires in the building's electrical system. This generator is not designed to be connected to an automatic transfer switch. Serious damage to the engine and inverter module may result.

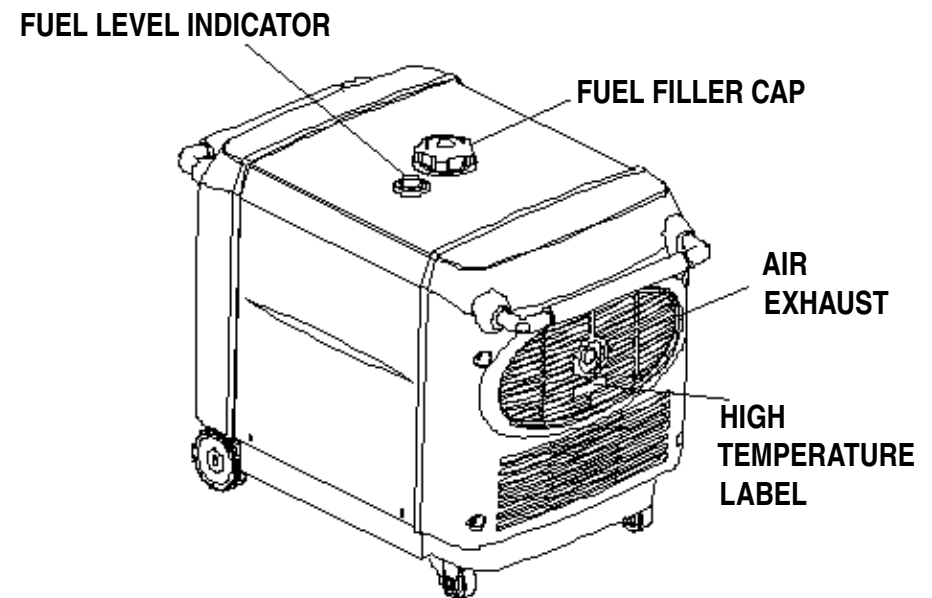
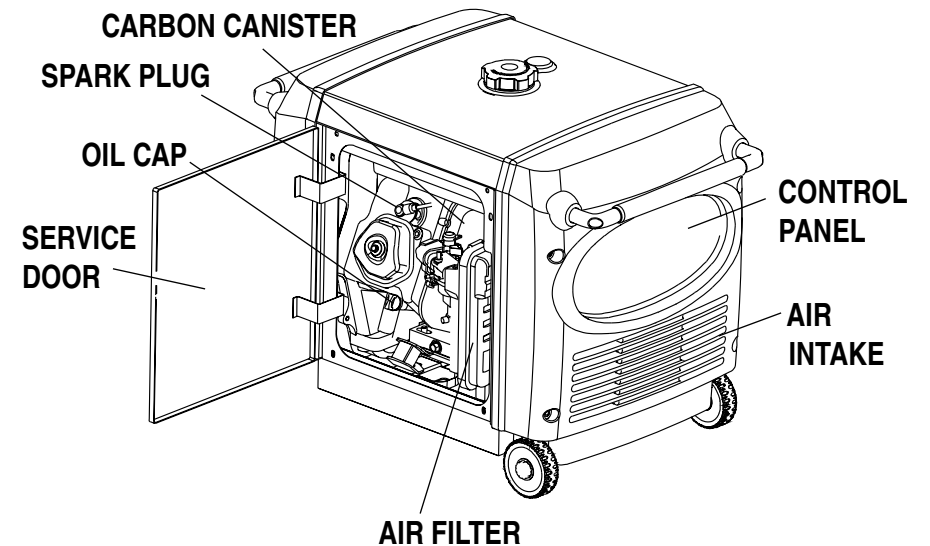
## ▲ WARNING

- Always perform a pre-operation inspection before starting the engine to prevent equipment damage or accident.
- Place the generator at least three feet (one meter) away from buildings, or other equipment during operation.
- Operate the generator on a level surface to prevent fuel spillage and/or oil starvation.
- Know how to stop the generator quickly and understand operation of all controls. Never permit anyone to operate the generator without proper instructions.
- Keep children and pets away from the generator while in operation.
- Keep away from rotating parts while the generator is running.
- The generator is a potential source of electrical shock when misused; do not operate with wet hands.
- Do not operate the generator in rain, snow, or anywhere it is exposed to moisture.
- Never operate the generator with the door open or any panels removed. Do not operate in any enclosure such as an RV compartment.

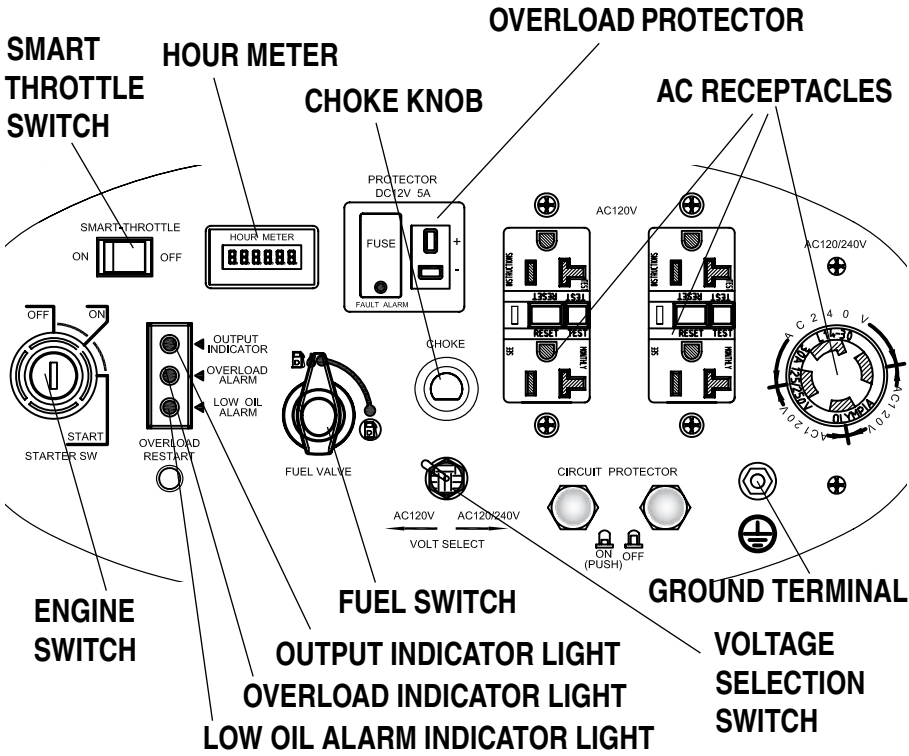
## 2. Component Locations

Read the labels and safety notes and precautions on the generator.

If a label comes off or becomes hard to read, contact your sales representative for a replacement.

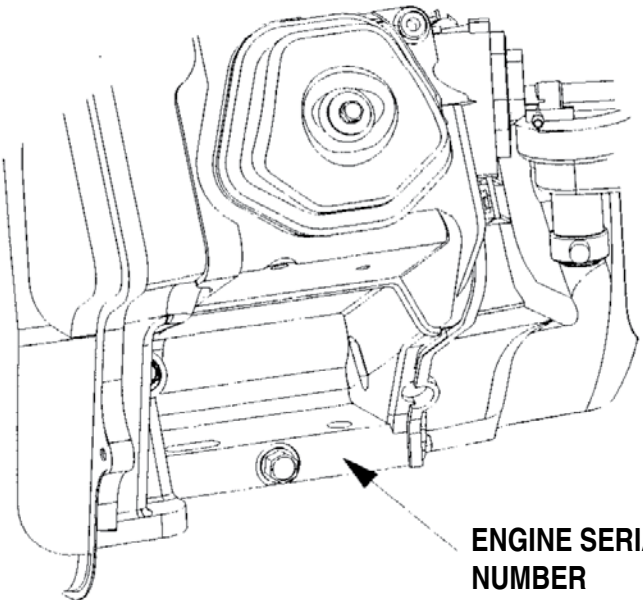



Control Panel — IGR6000H



Serial Number Identification and Location

The engine serial number is stamped on the engine block to the left of the oil drain plug. In most cases the battery will have to be removed to view it clearly. Refer to this number when ordering parts or making technical inquiries. In most cases the battery will have to be removed to view it clearly.



	MODEL NUMBER
	SERIAL NUMBER

### 3. Pre-Operation Check

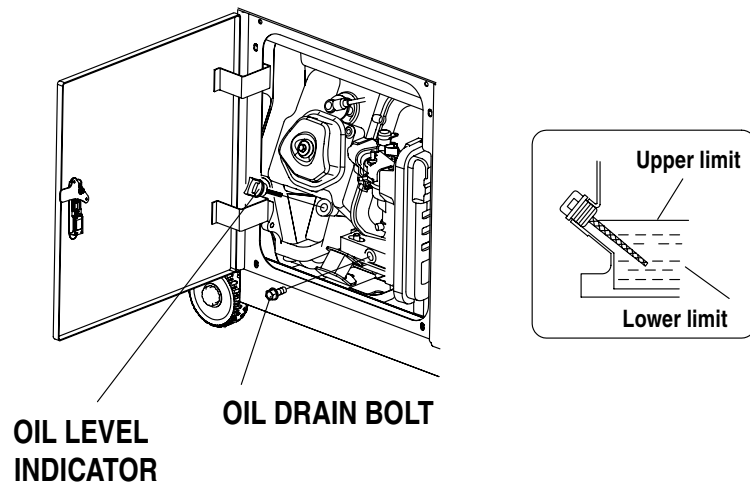
**▲ WARNING** Be sure to check the generator on a level surface with the engine stopped. Under no circumstances can this generator be used in an enclosed compartment.

**▲ WARNING** Running the engine with insufficient oil can cause serious engine damage.

#### 1. Check the engine oil level.

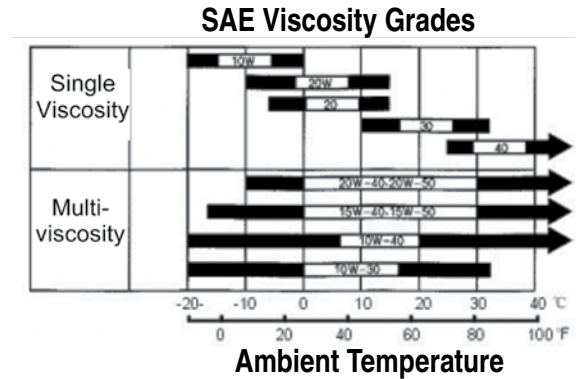
- Open left maintenance cover and wipe the oil level indicator with a clean rag.
- Check the oil level by inserting the oil level indicator in the filler hole, tighten, and unscrew it out.
- If the oil level is below the end of the oil level indicator, refill the recommended oil up to the top of the oil filler neck.

**▲ NOTE** The Low Oil Alarm System will automatically stop the engine before the oil level falls below the safe limit. However, to avoid the an unexpected shutdown, it is recommended to inspect the oil level and refill regularly.



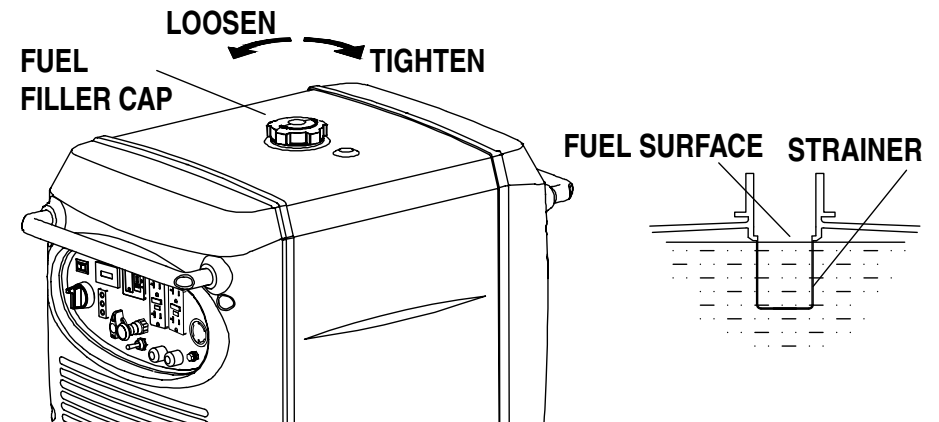
**▲ WARNING** Using non detergent oil or 2 cycle engine oil could shorten the engine's service life.

- Use a high-detergent, premium quality 4-stroke engine oil, certified to meet or exceed U.S. automobile manufacturer's requirements for API Service Classification SG/SF.
- Select the appropriate viscosity for the average temperature in your area.



#### 2. Check the fuel level.

- Fuel tank capacity is 5.9 gal. (22L).
- Use automotive unleaded 87-octane gasoline only. Do not use premium or high octane fuels. Engine is designed to run on regular gasoline. Engine damage and/or poor performance may result. If the fuel level is low, refill to the shoulder of the fuel strainer.
- After refueling, tighten the fuel filler cap securely.
- Never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.
- A fuel preservative and stabilizer should be added to any container of stored fuel.



## ▲ WARNING

- Gasoline is extremely flammable and is explosive under certain conditions.
- Refuel in a well-ventilated area with the engine stopped. Keep all possible ignition materials, sparks, and any other source of combustion away from the generator during refueling.
- Do not overfill the fuel tank (there should be no fuel above the upper limit mark). After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Make sure the area is dry before starting the engine. Spilled fuel or fuel vapor may ignite.
- Avoid repeated or prolonged contact with skin or breathing of vapor. **KEEP OUT OF REACH OF CHILDREN.**

### Gasoline containing alternate fuels

If you decide to use a gasoline containing ethanol, be sure its octane rating is no lower than the specification. Do not use a blend that contains more than 10% ethanol. Do not use gasoline containing methanol.

## ▲ WARNING

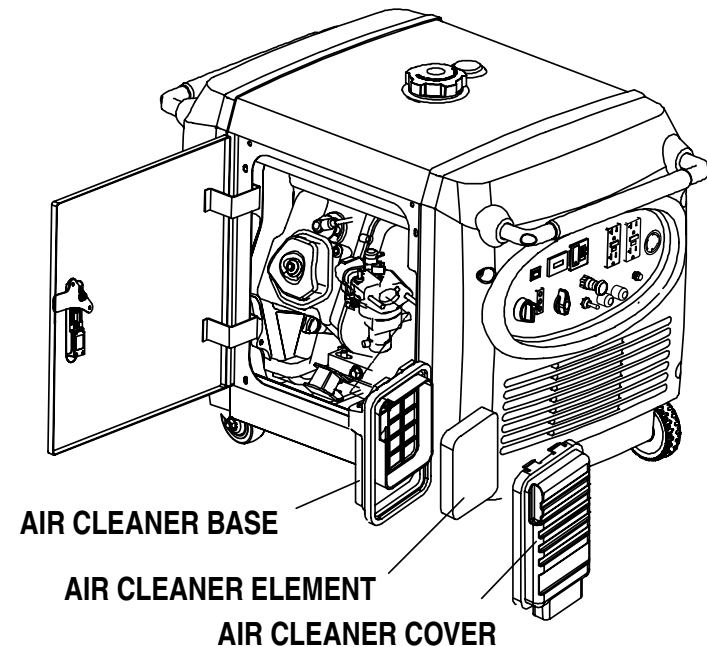
- Fuel system damage or engine performance problems resulting from the use of fuels that contain an improper alcohol blend are not covered under warranty.
- Before buying fuel from an unfamiliar station, determine if the fuel contains ethanol and if it does, confirm the type and percentage of ethanol used.
- Replace fuel with proper blend if you experience any undesirable operating symptoms while using a gasoline that contains ethanol, or one that you think contains ethanol.

## 3. Check the air cleaner.

- a. Check the air cleaner element to be sure it is clean and in good condition.
- b. Open the left side maintenance cover.
- c. Remove the air cleaner cover, remove the paper components from the air cleaner cover, and check air cleaner components.
- d. If the paper element is dirty or torn, replace it with a new one. Do not attempt to clean the element.

## ▲ CAUTION

- Never run the engine without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.



## 4. Starting The Engine

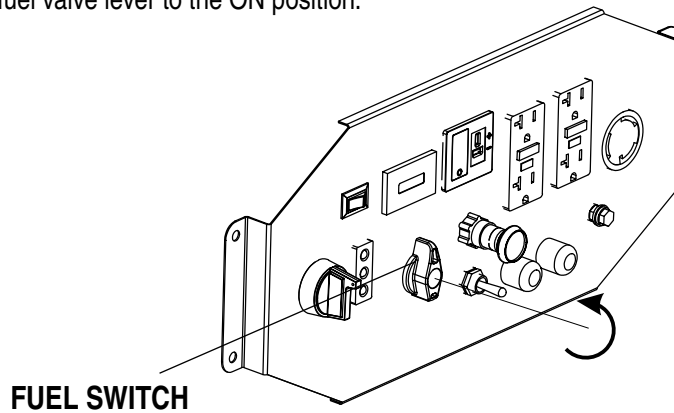
Disconnect any load from AC receptacle before starting engine.

### ▲ CAUTION

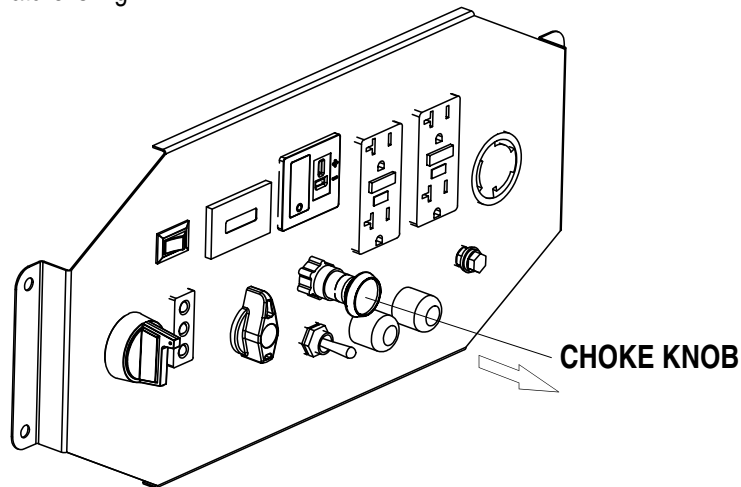
- When starting the generator after adding fuel for the first time or after long term storage, or after running out of fuel, turn the fuel valve lever to the "ON" position, then wait for 10 to 20 seconds before starting the engine.

#### 4. Starting Procedure

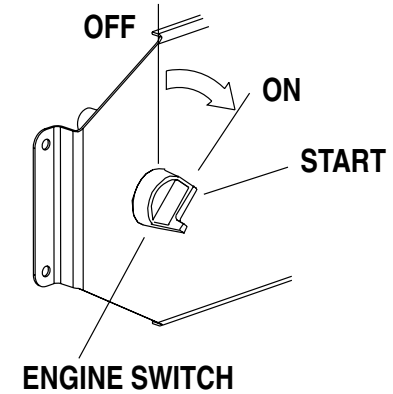
- a. Turn the fuel valve lever to the ON position.



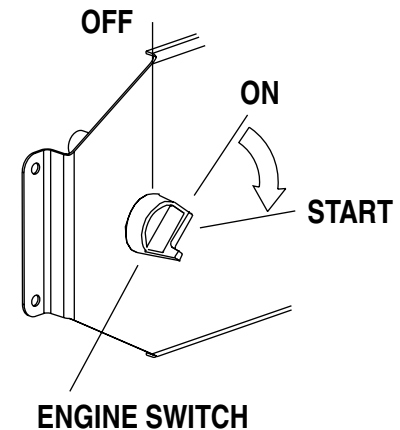
- b. Pull the choke knob out to the CLOSED position  
Do not use the choke if the engine is already warm or the ambient air temperature is high.



- c. Insert the engine key and turn the engine switch to ON position.

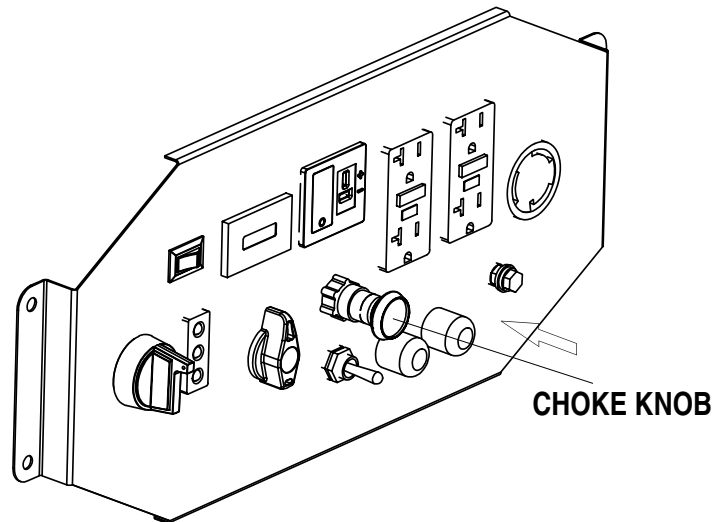


- d. Turn the engine switch to the START until the engine has started. Do not operate the starter for more than 10 seconds.





- e. Push the choke knob in to the OPEN position as the engine warms up.



### ▲ CAUTION

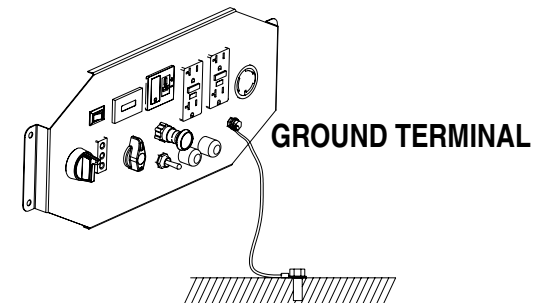
- Do not operate the generator when the ambient temperature is below -20° F (-29°)
- Do not operate the generator when the ambient temperature is above 113° F (45° C)

## 5. Generator Use

### Warnings and cautions

#### ▲ WARNING

- To prevent electrical shock from faulty appliances, the generator should be grounded. Connect a length of heavy cable between the generator's ground terminal and an external ground source.
- Connections for standby power to a building's electrical system must be made by a qualified electrician and must comply with all applicable laws and electrical codes. Improper connections can allow electrical current from the generator to back feed into the utility lines. Such back feed may electrocute utility company workers or others who contact the lines during a power outage. When utility power is restored the generator may explode, burn, or cause fires in the building's electrical system.
- Do not connect the generator to an automatic transfer device. Severe damage to the inverter module may result.



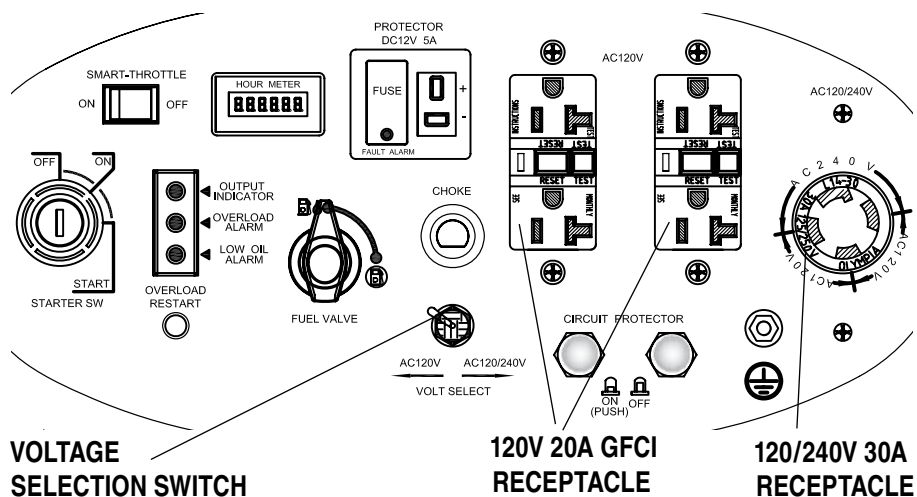
#### ▲ CAUTION

- The total wattage of all appliances connected must be considered.
- Limit operation requiring maximum power to 30 minutes. For continuous operation do not exceed the rated power of 2800 watts or 23.3 amps.
- Do not exceed the current limit specified for any one receptacle.
- Do not connect the generator to a household circuit. This could cause the damage to the generator or to electrical appliances in the house.
- Do not modify or use the generator for other purpose than it is intended for.
- Do not attempt to connect generators in parallel.
- Do not connect an extension to exhaust pipe.
- When an extension cable is required, make sure you use the proper size and length.
- 16 Gauge Cords- Any 16 gauge cord between 0-100 feet (0-30.5 meters) long will adequately handle tool and appliance loads up to 10 amps

- 14 Gauge Cords- a 14 gauge cord between 0-50 feet (0-15.2 meters) long will adequately handle loads between 10 and 15 amps.
- 12 Gauge Cords- If your load is between 10 and 15 amps and the length of the cord is 50-100 feet (15.2-30.5 meters), you need a 12 gauge cord to safely power any tool.
- The DC receptacle can be used while the AC power is in use. If both are being used at the same time, be sure not to exceed the total power for AC and DC.
- Most appliance motors require more than their rated wattage for start-up.
- Keep the generator away from other electric cables or wires such as commercial power supply lines.

### AC Power Application

The generator has the capability to provide 120V and 240V AC Power. It can do so simultaneously depending on the needs of the user. However, it is important to understand the receptacles, their current limitations, and how to distribute power efficiently.



The GFCI (ground fault circuit interrupter) shuts off power to the protected receptacles if a ground fault or current imbalance between two conductors is detected. If the reset button pops out, the appliance connected to the receptacle may be defective. If the appliance appears to be in good condition, press the reset button until a click is heard. This will restore power. If the reset button pops out again, disconnect all appliances disconnected immediately and have them inspected by a qualified electrician before attempting to use them again.

### ▲ WARNING

- Do not attempt to operate appliances if the ground fault circuit interrupter reset button pops out repeatedly during use.
- Only the ground fault circuit interrupter receptacle provides ground fault protection.

### Voltage Selection Switch

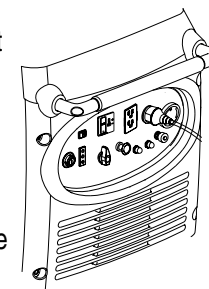
The voltage selection switch has two positions: AC120V and AC120/240V.

1. When the voltage selection switch is in the 120/240V position, the generator supplies both 120V and 240V AC power. If you operate the generator with the switch in this position, the electric current is limited to 15 amps to the 120V receptacles although it can provide 15 amps at 240V from the 120/240V receptacle.
2. When the voltage selection switch in the 120V position, the generator supplies 120V AC only. It can supply a full 30 amps to the 30 amp receptacle or 20 amps to the GFCI receptacle. Total current is limited to 45.8 amps at rated load.

### AC operation

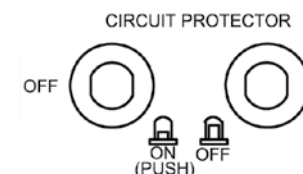
1. Start the engine and make sure only the output indicator light (green) comes on.
2. Confirm that the appliance to be used is switched off, and plug in the appliance.

- The L14-30 receptacle is rated at 30 amps. Should the current be exceeded, the circuit protection device will activate and cut all current to the receptacle. This will be indicated by the push button popping out. Reduce the load to the receptacle and reset the circuit protector by pushing in the button.



### ▲ CAUTION

- Substantial overloading that continuously lights the overload indicator light (red) may damage the generator. Marginal overloading that temporarily lights the overload indicator light (red) may shorten the service life of the generator.
- Be sure that all appliances are in good working order before connecting them to the generator. If an appliance begins to operate abnormally, becomes sluggish, or stops suddenly, turn off the generator engine switch immediately. Disconnect the appliance and examine it for signs of malfunction.



## Output and Overload Indicators

The output indicator light (green) will remain on during normal operating conditions.

If the generator is overloaded or if there is a short in the connected appliance, the output indicator light (green) will go out, the overload indicator light (red) will illuminate and current to the connected appliance will be shut off.

Stop the engine if the overload indicator light (red) comes on and investigate the overload source

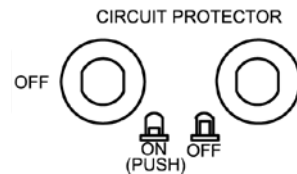
- Before connecting an appliance to the generator, check that it is in good order and that its electrical rating does not exceed that of the generator. Connect the power cord of the appliance and start the engine. See page 18 for restoring electrical power.

## ▲ NOTE

- When an electric motor is started, both the overload indicator light (red) and the output indicator light (green) may go on simultaneously. This is normal if the overload indicator light (red) goes off after about four (4) seconds. If the overload indicator light (red) stays on, consult your generator sales representative.

## Overload Reset Switch

Should the generator overload, AC power will be cut off but the engine will stay running. Correct the overload condition and then press the overload reset switch on the front panel. AC power will be restored immediately.



## DC Operation

The DC receptacle may be used for charging 12 volt automotive-type batteries only. It is not designed to operate DC motors or transformers. Output voltage is 15-30V. DC output will vary according to the position of the Smart-throttle switch.

1. Connect the charging cable to the DC receptacle of the generator and then to the battery terminals.

## ▲ WARNING

- To prevent the possibility of creating a spark near the battery, connect the charging cable first to the generator then to the battery. After charging, disconnect the cable first at the battery.
- Before connecting charging cables to a battery that is installed in a vehicle, disconnect the vehicle's ground battery cable. Reconnect the vehicle's ground battery cable after the charging cables are removed. This procedure will prevent the possibility of a short circuit and sparks if accidental contact is made between a battery terminal and the vehicle's frame or body.

## ▲ CAUTION

- Do not start an automobile engine with the generator still connected to the battery. The generator can be damaged.
- Connect the positive battery terminal to the positive charging cord. Do not reverse the charging cables, or serious damage to the generator and/or battery may occur.

## ▲ WARNING

- Batteries give off explosive gases; keep spark, flames, cigarettes, and other sources of ignition away.
- Provide adequate ventilation when charging.
- Batteries contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.
- If contact is made with skin, flush with water immediately.
- If contact is made in eyes, flush with water immediately for at least 15 minutes and contact a physician.
- Battery contents are poisonous — If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.
- KEEP OUT OF REACH OF CHILDREN.

2. Start the engine

### ▲ NOTE

- The DC receptacle may be used while the AC power is in use.
- An overloaded DC circuit will trip the DC circuit fuse. The fuse must be replaced before the DC receptacle is operative.

### ▲ CAUTION

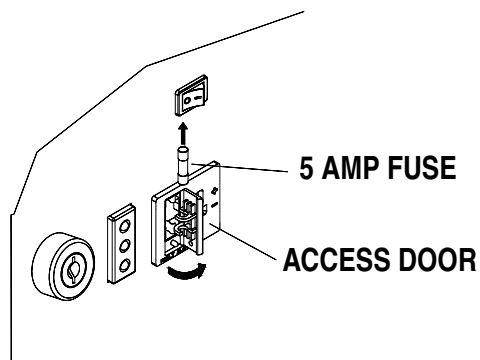
- Replace the fuse with one of the same size and rating (5A).
- Exceeding the current rating may lead to alternator damage.

### ▲ CAUTION

The DC output is to be used to charge batteries only. Serious damage to the stator windings can occur if connected to a DC motor or transformer.

### ▲ NOTE

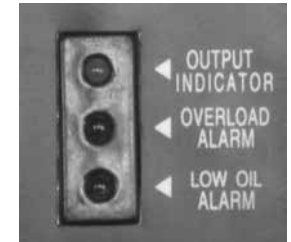
- The DC receptacle may be used while the AC power is in use.
- The DC receptacle is protected from an overload with a fuse. If the DC circuit is overloaded, the 5 amp fuse will blow and power to the DC receptacle will cease. The red light on the DC panel will illuminate. The fuse is located to the left of the receptacle and is accessed by snapping open the access door. Replace the fuse with one of the same capacity. Using a higher rated fuse may cause damage to the generator alternator.



### Low oil alarm system

The low oil alarm system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase falls below a safe limit, the low oil alarm system will automatically shut down the engine (the engine switch will remain in the ON position).

If the low oil alarm system shuts down the engine the red low oil alarm indicator light will come on when you operate the starter, and the engine will not run. If this occurs, search for any oil leaks. Add engine oil to resume normal operation.



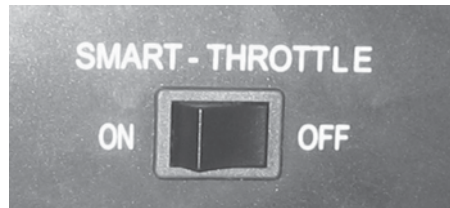
### Air Conditioning Operation

- For best results, the SMART throttle switch should be in the off position.
- Bring the generator to normal operating temperature before applying the air conditioning load. Always allow a 2 minute wait period when manually cycling an air conditioner off and on.
- A longer wait period may be required under unusually hot weather conditions.
- Additionally, all other loads should be turned off until the air conditioner has started and is performing normally. It is also important to follow the air conditioner manufacturer's instructions for starting and restarting for proper operation.
- Some air conditioner manufacturers offer a start capacitor or rapid start kit. The lack of a start capacitor can cause the air conditioner to draw too high a starting current and overload the generators. Contact your air conditioner manufacturer if you consistently have problems starting your air conditioner.
- This generator is not generally recommended for air conditioners exceeding 13,500 BTUs.

### SMART Throttle

When the SMART throttle is placed in the on position, engine speed is kept at idle automatically when the electrical load is disconnected and returns to the proper speed required by the electrical load when the load is reconnected.

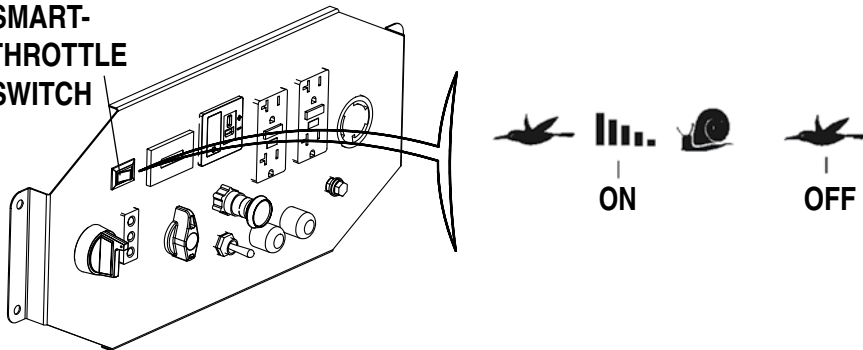
The engine speed varies according to the amount of load applied to the generator. Placing the smart throttle in the on position is recommended to minimize fuel consumption and engine noise while in operation.



### ▲ WARNING

- The Smart-throttle system does not operate efficiently if the electrical appliance will be used in a rapid on-off or low-to-high rpm mode.
- When high electrical loads are connected simultaneously, turn the Smart-throttle switch to the OFF position to reduce voltage fluctuation or shutdown.
- In DC operation, turn the Smart-throttle switch to the OFF position. When the Smart throttle is in the off position, the engine runs at rated load RPM.

### SMART-THROTTLE SWITCH



### High altitude operation

At high altitude, the standard carburetor air-fuel mixture will be excessively rich.

Performance will decrease, and fuel consumption will increase.

High altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor. If you always operate the generator at altitudes higher than 5000 feet (1500 meters) above sea level, have your authorized sales representative install a high altitude main jet.

Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 1000 feet or 305 meter increase in altitude. The effect of altitude on the horsepower will be greater than this if no carburetor modification is made.

### ▲ CAUTION

- Operation of the generator at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture. Be sure to have any modification reversed at lower altitudes.

### Temperature

High temperature adversely affects generator operation. Generator performance will decrease 1% for each 10°F (5.5°C) increase in temperature above 85°F (29°C).

The normal operating range of this generator is -20° to 113° F (-29° to 45°C)

### ▲ WARNING

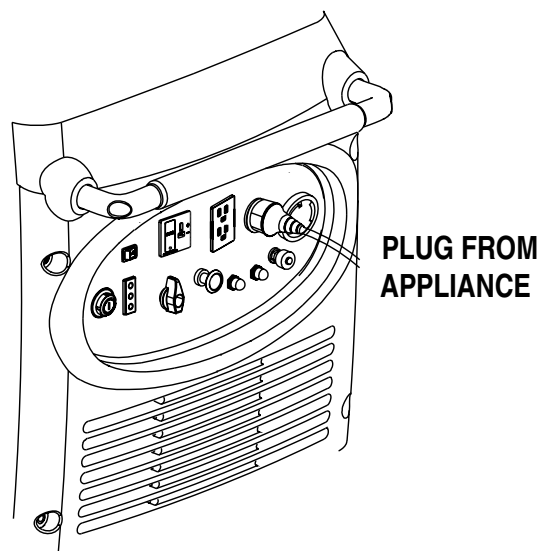
- Do not operate the generator when the ambient temperature is below -20°F (-29°C).
- Do not operate the generator when the ambient temperature exceeds 113°F (45°C).

## 6. Stopping The Engine

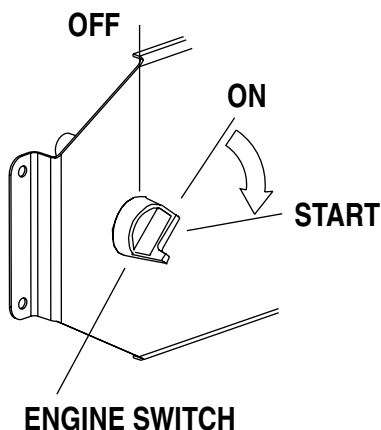
To stop the engine in an emergency, turn the engine switch to the OFF position.

### IN NORMAL USE:

1. Switch off the connected equipment and pull the inserted plug out.



2. Turn the engine switch to the OFF position.



## 7. Maintenance

Perform maintenance and adjustment to keep the generator in the best operating condition. Inspect or service as scheduled in the table below.

### ▲ WARNING

- Shut off generator before performing any maintenance. If the engine must be run, make sure the area is well ventilated. The exhaust contains poisonous carbon monoxide gas.

### ▲ CAUTION

- Use genuine parts or their equivalent. The use of replacement parts that are not of equivalent quality may damage the generator.
- When repairing or replacing the accessories of emission control system, make sure to use the EPA standard accessories.

### Emission control system

#### Emission source

Exhaust gas contains carbon monoxide, nitrous oxide (NOx), and hydrocarbons. It is very important to control the emissions of NOx and hydrocarbons as they are a major contributor to air pollution. Carbon monoxide is a poisonous gas. The emission of fuel vapors is a source of pollution as well. The MMD PowerPro generator engine utilizes a precise air-fuel ratio and emission control system to reduce the emissions of carbon monoxide, NOx, hydrocarbons, and evaporative fuel emissions.

#### Regulation

Your engine has been designed to meet current Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) clean air standards if so equipped and designated. The regulations dictate that the manufacturer provides operation and maintenance standards regarding the emission control system. Tune-up specifications are provided in the specifications section and a description of the emission control system may be found in an appendix to this manual. Adherence to the following instructions will ensure your engine meets the emission control standards.

## Modification

Modification of the emission control system may lead to increased emissions.

Modification is defined as the following:

- Disassemble or modify the function or parts of the intake, fuel or exhaust system.
- Modify or destroy the speed governing function of the generator.

## Engine faults that may affect emission

Any of the following faults must be repaired immediately. Consult with your authorized MMD Equipment service center for diagnosis and repair:

- Hard starting or shut down after starting
- Unstable idle speed
- Shut down or backfire after applying an electrical load
- Backfire or after fire.
- Black smoke and/or excessive fuel consumption

## Replacement parts and accessories

The parts making up the emission control system applied to the engines have been specifically approved and certified by the regulatory agencies. You can trust the replacement parts supplied by MMD Equipment have been manufactured to the same production standard as the original parts. The use of replacement parts or accessories which are not designed by MMD Equipment may affect the engine emission performance. The manufacturers of replacement parts and accessories have the responsibility to guarantee that their replacement products will not adversely affect emission performance.

## Maintenance

Maintain the generator according to the maintenance schedule in this section. More frequent maintenance should be performed when used in dusty areas, under conditions of high load, temperature, and humidity.

## Air Quality Index (only for California certified models)

CARB requires that an air quality index label be attached to every certified engine showing the engine emission information for the emission duration period. The label is provided for the user to compare the emission performance of different engines. The lower the air index, the better the engine emission performance. The description of durability is helpful for the user to learn the engine emission duration period and the service life of emission control system. Refer to the warranty section of this owner's manual for more information.

<p>THE AIR INDEX OF THIS ENGINE IS 3</p> <p>MOST CLEAN 0 2 4 6 8 10 LEAST CLEAN</p>	
<p><b>EMISSION CONTROL INFORMATION</b></p> <p>THIS ENGINE IS CERTIFIED TO OPERATE ON UNLEADED GASOLINE.          THIS ENGINE MEETS U.S. EPA AND CALIFORNIA EXH AND EVP EMISSION          REGULATIONS FOR SMALL OFF-ROAD ENGINES FOR 2014 MODEL YEAR.          ENGINE FAMILY: EWKPS.3982GC EXH ECS: TWC+PAIR EVAP ECS: CP          CARB EVAP FAMILY: CP3982 EPA EVAP FAMILY: EWKPPNHEQ002          DISPLACEMENT: 389CC EMISSIONS COMPLIANCE PERIOD: 250 HOURS          CHECK OWNER'S MANUAL FOR FURTHER DETAILS</p>	
<p>DOM:2014 J F M A M J J A S O N D</p>	

*The air quality index label is designed to be permanently affixed to the generator and should not be removed.*

Regular Service Period (1)		Each Use	First Month or 20 Hours	Every 3 Months or 50 Hours	Every 6 Months or 100 Hours	Every Year or 300 Hours
ITEM — Perform at every indicated month or operating hour interval, whichever comes first.						
Engine Oil	Check level	o				
	Change		o		o	
Air Cleaner	Check	o				
	Clean/replace			o (2)		
Spark Plug	Clean/adjust				o	
Spark Arrester	Clean				o	
Fuel Sediment Cup	Clean				o	
Valve Clearance	Check/adjust					o (3)
Fuel Tank and Filter	Clean					o (3)
Fuel Lines	Check	Every 2 years (Replace if necessary) (3)				

## NOTE:

- Log hours of operation to determine proper maintenance.
- Service more frequently when used in dusty conditions.
- These items should be serviced by an authorized MMD service center unless the owner has the proper tools and is mechanically proficient.

## ▲ CAUTION

- Make sure to turn the engine switch and the fuel cap vent lever OFF before draining oil.

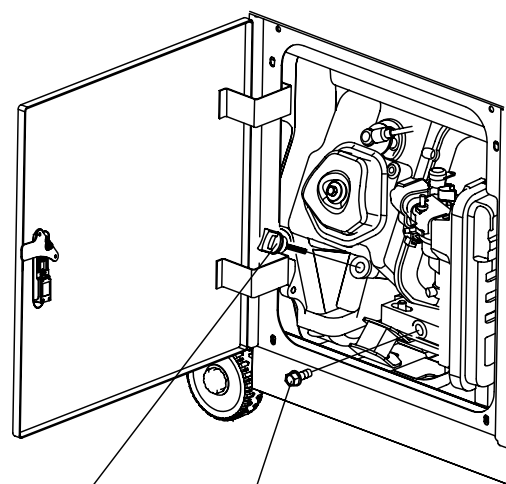
### 1. CHANGING OIL

Drain the oil while the engine is still warm to assure fast and complete draining.

- Open left side maintenance cover.
- Remove the oil cap.
- Remove the drain bolt and drain the oil. There is a rubber plug in the bottom of the generator pan that can be removed to facilitate draining the oil. The generator will have to be raised off the ground and supported while the oil drains. Retighten the bolt securely.
- Refill with the recommended oil, and check the oil level.
- Close the left side maintenance cover.

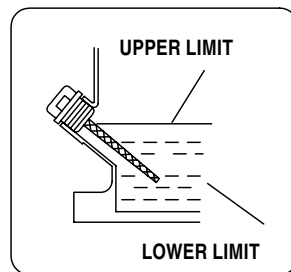
#### Engine oil capacity

Model	Oil Capacity qt. (L)
IGR6000H	1.2 (1.1)



OIL CAP /  
OIL LEVEL  
INDICATOR

DRAIN  
BOLT



## ▲ NOTE

- Please dispose of used motor oil in a manner that is compliant with environment and local disposal regulations. Do not throw it in the trash, pour it on the ground, or down the drain.

### 2. AIR CLEANER SERVICE

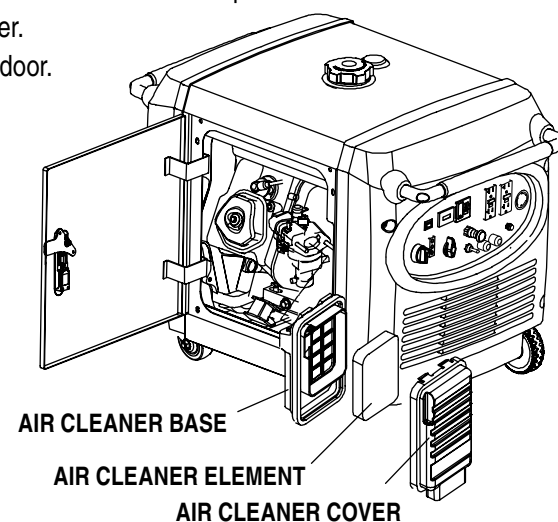
A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the generator in extremely dirty areas.

## ▲ WARNING

- Do not use gasoline or low flash point solvents for cleaning. They are flammable and explosive under certain conditions.

## ▲ CAUTION

- Never run the generator without the air cleaner, otherwise rapid engine wear may result.
- Open service door.
  - Unsnap the clips and remove the air cleaner cover.
  - If the paper element is dirty, torn, or replacement is called for based on hours of operation, replace it with a new one. Do not attempt to clean the element.
  - Reinstall the air cleaner cover.
  - Close and latch the service door.





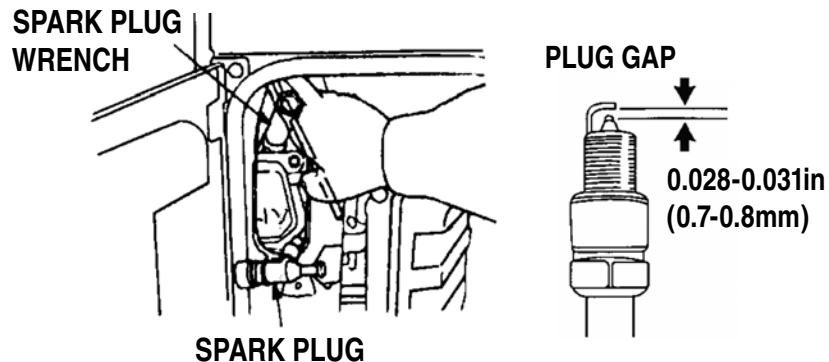
### 3. SPARK PLUG MAINTENANCE

To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

Recommended spark plug: WR7DC

To ensure proper engine operation, the spark plug must be properly gapped and free of deposits.

- Open the service door.
- Remove the spark plug cap.
- Use the wrench provided to remove the spark plug.
- Clean any dirt from around the spark plug base.

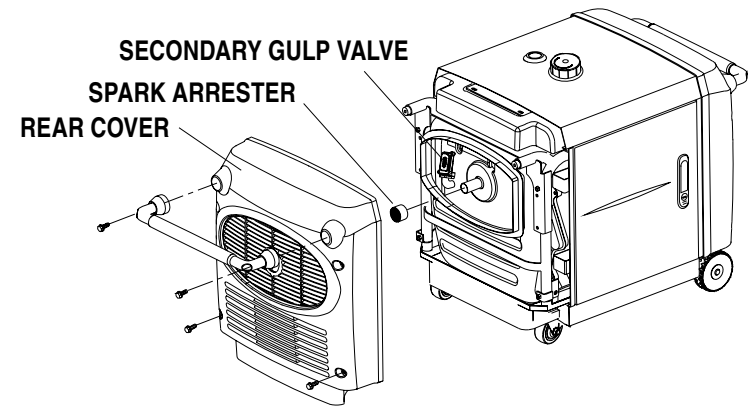


- Visually inspect the spark plug. Discard if the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
- Measure the plug gap with a feeler gauge. The gap should be 0.028-0.031in (0.7-0.8mm). Correct as necessary by carefully bending the side electrode.
- Install the spark plug carefully, by hand, to avoid cross-threading.
- After a new spark plug has been seated by hand, it should be tightened 1/2 turn with a wrench to compress the sealing washer. If a used plug is being reinstalled, it should only require 1/8 to 1/4 turn after being seated.
- Reinstall the spark plug cap.
- Close and latch the service door.

### ▲ CAUTION

- The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the generator.
- Never use a spark plug with an improper heat range.

### 4. Spark arrester maintenance



- Remove the generator rear cover to access the spark arrester.
- Remove the spark arrester from the muffler by unscrewing the clamp.
- Clean the spark arrester with a stiff wire brush.
- Replace if the wire mesh is perforated or torn.
- Reinstall the spark arrester.
- Reinstall rear cover.

### ▲ WARNING

- If the generator has been running, the muffler will be very hot. Allow it to cool before proceeding.

### ▲ CAUTION

- The spark arrester must be serviced every 100 hours to maintain its efficiency.

### ▲ NOTE

- Inspect the spark arrester screen for holes or tears. Replace as necessary.

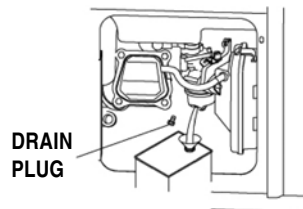
## 8. Transporting and Storage

To prevent fuel spillage when transporting or during temporary storage, the generator should be secured in its normal upright operating position with the engine switched OFF. Fuel vapors or spilled fuel may ignite. Transporting the generator with gasoline in the fuel tank is prohibited.

### Transporting

#### ⚠ WARNING

- When transporting the generator in a vehicle, drain all fuel from the generator.
- Do not operate the generator while it is on or in a vehicle. Take the generator out of the vehicle and use it in a well ventilated area.
- Avoid a storage area exposed to direct sunlight when putting the generator in a vehicle. If the generator is left in an enclosed vehicle for many hours, high temperature inside the vehicle could cause residual fuel to vaporize resulting in a possible explosion.
- Do not drive on a rough road for an extended period with the generator on board.



### Storage

Before storing the unit for an extended period:

1. **Clear storage area of excessive humidity and dust.**
2. **Drain all gasoline from the fuel tank into an approved gasoline container.**
  - a. Turn the engine switch ON, and loosen the carburetor drain screw and drain the gasoline from the carburetor into a suitable container.
  - b. Tighten the carburetor screw, close the fuel valve lever and left side maintenance cover.

#### ⚠ WARNING

- Gasoline is extremely flammable and explosive under certain conditions.
  - Do not smoke or allow flames or sparks in the area.
3. **Change the engine oil** (see page 30).

#### 4. Spark plug and engine

- a. Remove the spark plug and pour about a tablespoon of clean engine oil into the cylinder.
- b. Crank the engine several revolutions to distribute the oil and then reinstall the spark plug.
- b. Slowly pull the starter grip until resistance is felt. At this point, the piston is coming up on its compression stroke and both the intake and exhaust valves are closed. Storing the engine in this position will help to protect it from internal corrosion.

#### ⚠ NOTE

- Recharge the battery once a month while storing.

### Fuel Treatment and Exercising the Generator

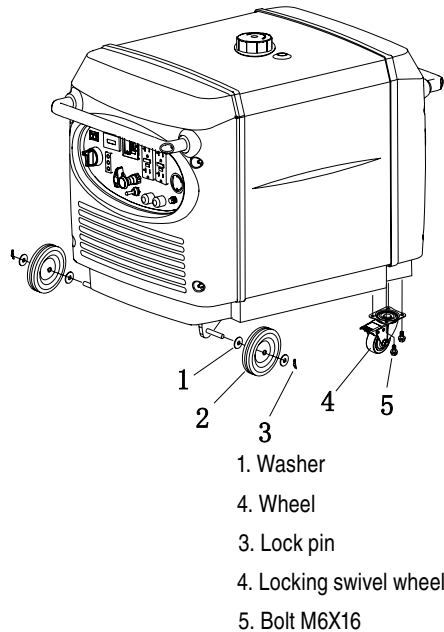
Any small engine is very susceptible to fuel varnishing. Fuel systems have very small orifices and passageways which can easily become clogged by fuel residue that takes the form of gum and varnish. This can lead to hard starting and rough running and possibly cause the engine not to start at all. As EPA regulations dictate no kits available to renew a carburetor, carburetor replacement will be necessary. Fuel preservatives are readily available at leading RV and marine retailers. Regularly add a fuel preservative to the generator fuel tank or fuel supply. Drain the carburetor bowl prior to any storage period longer than 30 days.

It is essential that the generator be exercised on a regular basis. This will prevent the accumulation of varnish or sludge in the fuel system and also remove moisture from the generator windings. Additionally, it will lubricate the engine seals, other moving components, and keep the battery charged. Exercise the generator by running it with at least 50% load for one hour every month.

## 9. Wheel Kit

To install the front wheels, install a washer on the axle, then the wheel, another washer and secure with a wheel clip.

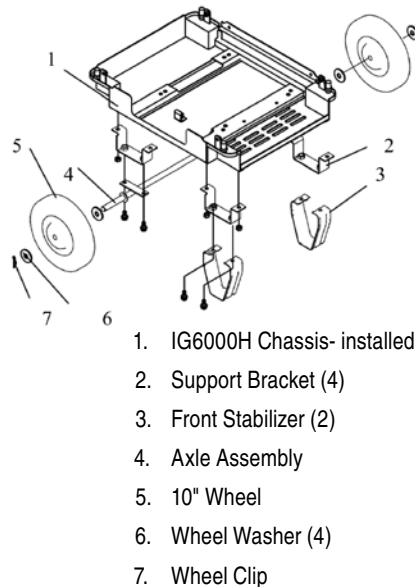
To install the locking swivel wheels, line up the bolt holes in the chassis with the holes in the wheel attaching plate. Secure with the 4 bolts.



### Assembly:

1. Install the four support brackets and secure with bolts.
2. Attach the front stabilizers to the chassis (below the handles)
3. Attach the axle assembly.
4. Install one washer on the axle against each welded stop.
5. Install the two wheels.
6. Install the two remaining washers and secure with the wheel clips.

The handles are preassembled before packaging. To raise the handles, simply raise the handle assembly to a horizontal position. To retract the handles, slide the chrome collars toward you to clear the sleeve and lower them to the starting position.



## 10. Troubleshooting

### Engine will not start

Problem/Possible cause	Corrective action
No fuel in tank	Refuel with gasoline
Fuel switch not on	Turn fuel switch to ON position
Not enough oil in engine	Refill with recommended oil
Fuel not reaching carburetor	How to check: 1. Turn off fuel valve and loosen drain screw 2. See if fuel is flowing from drain when fuel valve is turned on. If the engine still does not start, please take the generator to an authorized sales representative.
No spark from spark plug	Check spark plug or replace spark plug

### How to check spark plug:

1. Remove spark plug cap and clean any debris off sparkplug.
2. Remove spark plug and install spark plug in the plug cap.
3. Set the plug-side electrode on the cylinder head to the ground.
4. Pull the recoil starter. Sparks should jump across plug gap.

If the engine still does not start, please take the generator to an authorized sales representative.

### Appliance does not operate

Problem	Corrective action
Output indicator not on	Check appliance/equipment for defects
Overload indicator on	1. Replace appliance/equipment, or have repaired. 2. Stop and restart engine and try again.

If still not operational, please take the generator to an authorized sales representative.

### No power to the DC receptacle

Problem	Corrective action
DC circuit fuse blown	Replace fuse

If still not operational, please take the generator to an authorized sales representative.

## ▲ WARNING

Make sure there is no spilled gasoline around spark plug. Spilled fuel may ignite.

## 11. Specifications

<b>Model</b>	<b>IGR6000H</b>
<b>Rated Output, watts</b>	5500
<b>Rated Current, amp</b>	45.8 / 22.9
<b>Maximum Output, watts</b>	6000
<b>Phase</b>	Single
<b>Parallel operation allowed</b>	No
<b>Maximum Current, amp</b>	50 / 25
<b>AC Voltage</b>	120/240
<b>Frequency, Hz</b>	60
<b>DC Output</b>	12V @ 5A
<b>HP @ rated RPM</b>	10.3 @ 3600
<b>Starting System</b>	Recoil/Electric
<b>Engine Type</b>	Air cooled, single cylinder, 4-stroke, OHV with electronic ignition
<b>Displacement, cc</b>	389
<b>Compression Ratio</b>	8.5:1
<b>Ignition System</b>	Transitionized
<b>Spark Plug</b>	WR7DC
<b>Fuel</b>	Regular unblended automotive gasoline (87-octane)
<b>Lube Oil</b>	SAE 10W30 (see viscosity chart)
<b>Oil Capacity - qt. (L)</b>	1.2 qt. (11.6L)
<b>Noise Level, no load-full load, dB @ 23 ft.</b>	63-70
<b>Rated load continuous run time, hrs.</b>	6
<b>Fuel tank capacity, gal.</b>	5.9
<b>Dimensions, LxWxH, in.</b>	32.25 x 19.5 x 23.5
<b>Dry Weight, lb.</b>	223
<b>Receptacles</b>	2-125V GFCI 20A; L14-30 125V/240V T-Lock 30A
<b>Tune Up Specifications</b>	
<b>Spark Plug Gap</b>	0.024 – 0.028 in. (0.6-0.7 mm)
<b>Valve Clearance (Intake)</b>	0.0039 ± 0.0008 in. (0.10 ± 0.02 mm)
<b>Valve Clearance (Exhaust)</b>	0.0059 ± 0.0008 in. (0.15 ± 0.02 mm)

## 12. Warranty

### For all MMD Equipment PowerPro Inverter Generators

#### Buyer Information:

Generators that are supplied with applicable products as standard, original equipment are covered by this warranty from the date of original retail purchase for a period of three years for residential use and one year for commercial applications. Batteries shipped with generators are warranted by the supplier. Units used in rental fleets or as demonstration models will be considered commercial usage. The warranty coverage is continual from the original date of purchase, and does not restart upon the replacement of any part or complete unit. Individual parts replaced at any point during the warranty period are only eligible for warranty coverage for the balance of the original warranty period.

Product Line	Commercial	Retail
Inverter Generators	1 Year	3 Years

To be eligible for warranty service, the product must be purchased in the United States or Canada from an authorized MMD sales representative. This warranty applies to the original retail purchaser only and is not transferable. Proof of purchase and registration is required. Parts and service labor will be covered by MMD Equipment for any failure that is proven to be a failure in material or workmanship under normal use during the applicable warranty time period. This coverage is limited to parts, and labor. It is the responsibility of the end user to return the product to the nearest authorized repair center as directed by the warranty administration office. MMD Equipment reserves the right to repair or replace any part or unit at its option. MMD Equipment may request defective parts to be returned. Anything replaced under warranty becomes the property of MMD Equipment.

THIS WARRANTY DOES NOT EXTEND TO PARTS AFFECTED OR DAMAGED BY ACCIDENT AND/OR COLLISION, NORMAL WEAR, FUEL CONTAMINATION OR DEGRADATION, USE IN AN APPLICATION FOR WHICH THE PRODUCT WAS NOT DESIGNED OR ANY OTHER MISUSE, NEGLIGENCE, INCORPORATION OR USE OF UNSUITABLE ATTACHMENTS OR PARTS, UNAUTHORIZED ALTERATION, OR ANY CAUSES OTHER THAN DEFECTS IN MATERIAL OR WORKMANSHIP OF THE PRODUCT. THIS WARRANTY DOES NOT EXTEND TO NORMAL MAINTENANCE ITEMS SUCH AS BELTS, HOSES, SPARK PLUGS AND FILTERS PAST THE FIRST SCHEDULED REPLACEMENT OR SERVICE INTERVAL FOR THESE ITEMS WHICHEVER COMES FIRST. MMD WILL PAY FOR MINOR ADJUSTMENTS FOR A PERIOD OF NINETY DAYS FROM THE INSERVICE DATE OF THE GENERATOR. MMD DENIES ANY RESPONSIBILITY FOR LOSS OF TIME OR USE OF THE PRODUCT, TRANSPORTATION, COMMERCIAL LOSS, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGE. ANY IMPLIED WARRANTIES ARE LIMITED TO THE DURATION OF THIS WRITTEN LIMITED WARRANTY.

The U.S. Environmental Protection Agency (EPA) require manufacturers of small off-road engines to warranty their products with a two year warranty for those components that are specified as being part of the emission control system. MMD Power Equipment and EPA offer the following explanation of the Emission Control Warranty. In the United States and Canada, new small off-road engines must be designed, built, and equipped to meet stringent emission standards. MMD must warrant the emission control system on your 2011 engine for the periods of time listed below provided there has been no abuse, neglect, improper maintenance, or unauthorized application of your small off-road engine. If a warrantable condition is determined, MMD Equipment will repair your small off-road engine at no cost to you including diagnosis, parts, and labor. Emissions control parts on the engine are warranted for a period of two years, subject to provisions set below. If any covered part on your engine is defective, the part will be repaired or replaced by MMD Power Equipment. You are responsible to maintain the engine as defined in your MMD Generator Owner's Manual. MMD recommends that you retain all record/receipts covering maintenance on your engine but MMD Equipment cannot deny warranty claims based on the lack of receipts or for your failure to perform all scheduled maintenance. You may be denied warranty coverage if a part has failed due to abuse, neglect, improper maintenance, or unapproved applications.

Repair or replacement parts are warranted for ninety (90) days from the date of purchase. Any part replaced during the base warranty period assumes the remainder of that warranty period or ninety (90) days, whichever is greater. An exception is made for the following parts which will be warranted for six months (180 days) from date of purchase. Selected generator parts: alternator assembly, stator, rotor, inverter module. Selected power train parts: replacement long block, cylinder block, cylinder head, crankshaft, camshaft, balance shaft, manifolds, and major castings. To be eligible for warranty coverage, the replacement part must have been purchased in North America from an authorized MMD sales representative. This warranty applies to the original retail purchaser only and is not transferable. Proof of purchase is required. Parts exported from North America are excluded from warranty coverage. (1) Repair or replacement parts will be covered by MMD Equipment for any failure that is proven to be a failure in material or workmanship under normal use during the warranty period. The warranty for replacement parts will be limited to direct replacement only with no allowance for freight and transportation charges. The issuance of credit or a cash return of the purchase price will not be applicable. MMD Equipment may request defective parts to be returned for examination before the issuance of credit. (2) Reimbursement of labor charges to replace a defective part under its warranty period will be limited only to authorized service centers and then only if an authorized service center installed the defective part. Travel time is not authorized.

# 13. Emission Control System

## Emission Control System Warranty

In the United States and California, new small off-road engines must be designed, built and equipped to meet stringent emission standards. MMD Equipment must warrant the emission control system on your generator engine for the periods of time listed below provided there has been no abuse, neglect, improper maintenance, or unauthorized application of your small off-road engine.

If a warrantable condition is determined, MMD Equipment will repair your small off-road engine at no cost to you including diagnosis, parts, and labor. Shipping of your unit to and from a warranty service center is not covered by this warranty.

### Coverage

Emissions control parts on the engine are warranted for a period of two years, subject to provisions set below. If any covered part on your engine is defective, the part will be repaired or replaced by MMD Equipment.

### Owner's Responsibilities

You are responsible to maintain the engine as defined in your MMD Equipment Owner's Manual. MMD Equipment recommends that you retain all record/receipts covering maintenance on your engine, but MMD Equipment cannot deny warranty claims based on a lack of receipts or for your failure to perform all scheduled maintenance. You may be denied warranty coverage if a part has failed due to abuse, neglect, improper maintenance, or unapproved applications.

You are required to bring your generator to an authorized MMD Equipment sales representative for repairs as soon as a problem exists. For emissions warranty service, contact your nearest sales representative. For a listing, visit [www.mmdequipment.com/warranty-claims.html](http://www.mmdequipment.com/warranty-claims.html), or by calling 800-433-1382.

### Emission Control System Parts

Coverage under this warranty extends only to the emissions control parts listed below:

- |                                      |   |
|--------------------------------------|---|
| 1. Fuel System                       | 5. Crankcase Breather System                      |
| A. Carburetor gaskets                | A. Breather assembly                              |
| B. Fuel lines, fittings, and clamps  | B. Breather tube                                  |
| C. Fuel filter (if equipped)         | 6. Air Injection System                           |
| D. Fuel pump (if equipped)           | A. Secondary air injection valve                  |
| E. Carburetor                        | 7. Fuel Tank Evaporative Emissions Control System |
| 2. Intake System                     | A. Fuel tank                                      |
| A. Air cleaner assembly              | B. Fuel cap                                       |
| B. Intake manifold                   | C. Carbon canister and brackets                   |
| 3. Ignition System                   | 8. Miscellaneous Items used in above              |
| A. Ignition coil                     | A. Hoses, connectors, and fittings                |
| B. Spark plug                        | B. Electrical switches                            |
| 4. Exhaust System                    |   |
| A. Catalytic converter (if equipped) |   |
| B. Exhaust manifold                  |   |
| C. Gaskets                           |   |

## CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT

The California Air Resources Board (CARB) and MMD Equipment are pleased to explain the emissions control system warranty on your 2011 and later small off-road engine (SORE). In California, new SOREs must be designed, built, and equipped to meet the State's stringent anti-smog standards. MMD Equipment must warrant the emissions control system on your SORE for the period of time listed below provided there has been no abuse, neglect or improper maintenance of your SORE.

Your emission control system may include parts such as the carburetor, fuel tank, fuel cap, fuel lines, the ignition system, and catalyst muffler. Also included may be hoses, belts, clamps, connectors and other emission-related assemblies.

When a warrantable condition exists, MMD Equipment will repair your small off-road engine at no cost to you including diagnosis, parts, and labor. Shipping of your unit to and from a warranty service center is not covered by this warranty.

### Manufacturer's Warranty Coverage

The emissions control system is warranted for two years. If any emissions related part on your engine is defective, the part will be repaired or replaced by MMD Equipment.

### Owner's Warranty Responsibilities

1. As the SORE owner, you are responsible for the performance of the required maintenance listing in your owner's manual. MMD Equipment recommends that you retain all receipts covering maintenance on your SORE but MMD Equipment cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.
2. As the SORE owner, you should however be aware that MMD Equipment may deny your warranty coverage if your SORE or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.
3. You are responsible for presenting your SORE to a MMD Equipment authorized service center as soon as the problem exists. Warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty coverage, you should contact MMD Equipment Service Center at:

MMD Equipment  
Phone: 800-433-1382  
E-mail: [warranty@mmdequipment.com](mailto:warranty@mmdequipment.com)

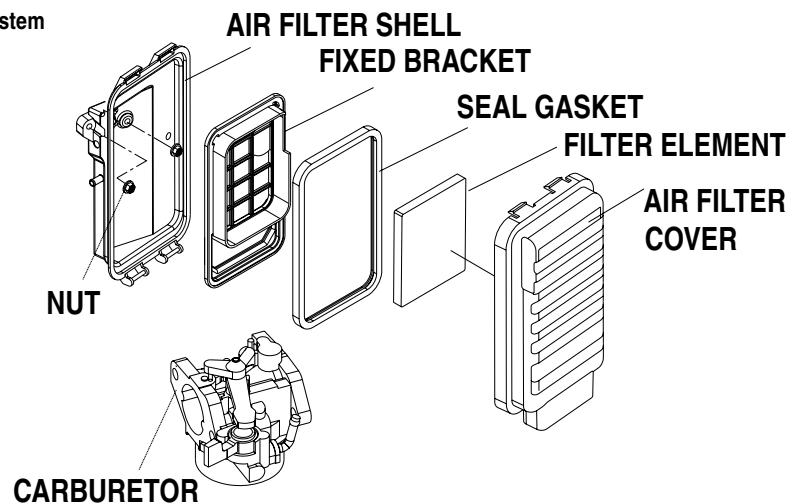
If so designated, your generator has an engine that has been approved by the California Air Resources Board. Other than the tune up procedures specified in the maintenance section, no additional maintenance is required.

The emission control system has the following components:

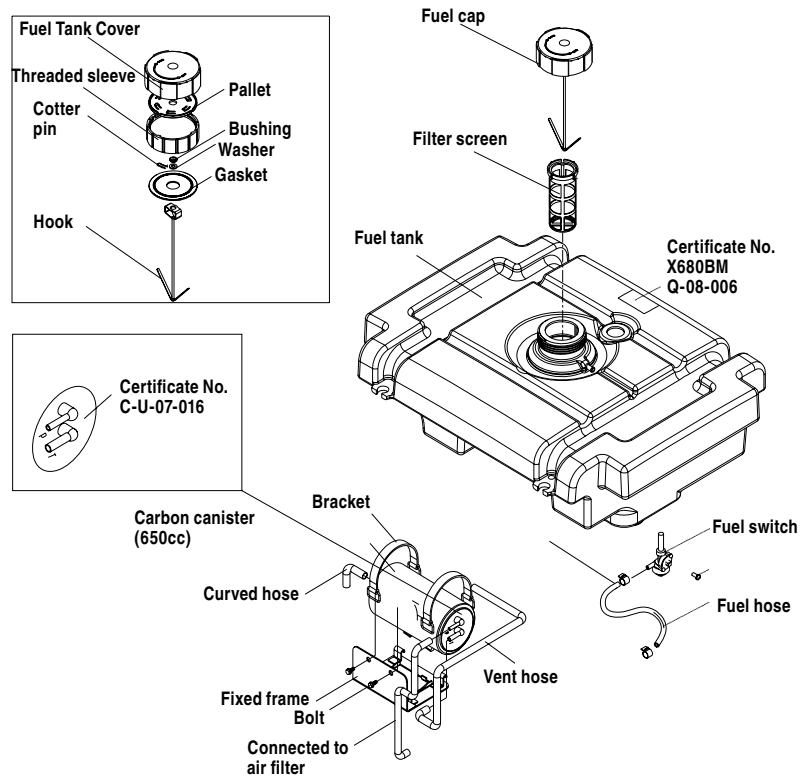
1. Fuel System: The fuel tank, cap, indicator and hoses are specially designed and constructed to not allow fuel vapors to permeate and be released to the atmosphere.
2. A carbon activated canister collects gasoline vapors from the fuel tank and returns them to the combustion chamber for burning.
3. A catalyst is built into the muffler to further treat the engine exhaust.
4. A secondary air injection valve adds combustion air to ignite unburned fuel in the exhaust.

Contact your authorized MMD Equipment service center to obtain the correct replacement parts and service on this system.

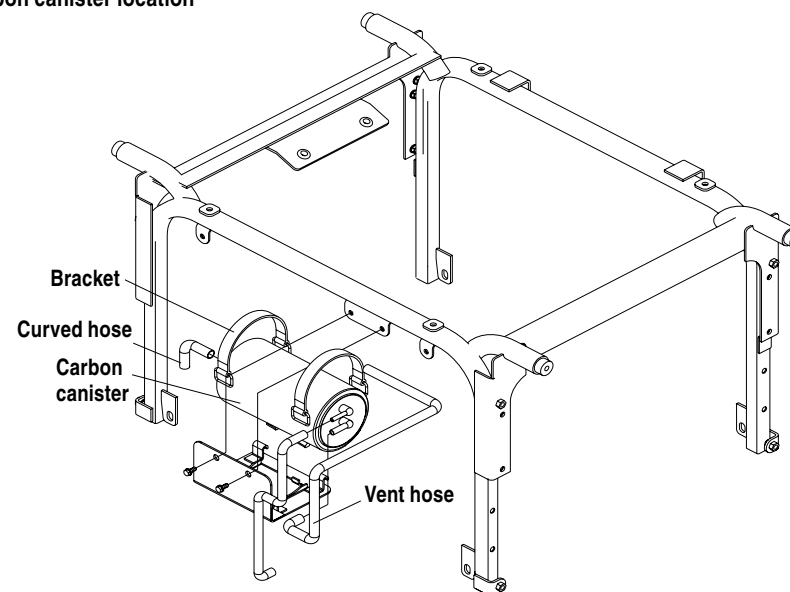
## Inlet system



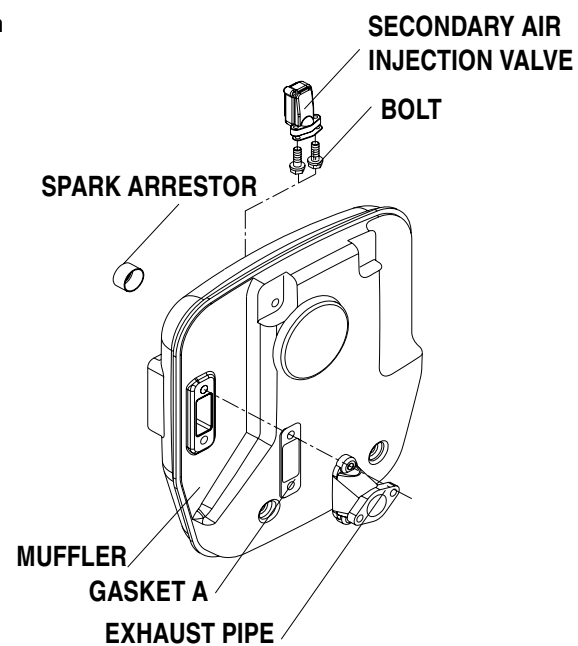
## Fuel system



## Carbon canister location



## Exhaust system



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Please complete this page and **FAX** to:  
**210-923-3489**

**MMD Equipment**  
602 Dunton Street  
San Antonio, TX 78226  
*Attn: Product Registration*

E-mail \_\_\_\_\_



## Notes

[illegible]

## Notes

[illegible]





*Scan for MMD  
technical support*



## **MMD Equipment**

4175 Guardian Street • Simi Valley, CA 93063

602 Dunton St. • San Antonio, TX 78226

2075 High Hill Road • Logan Township, NJ 08085

[www.mmdequipment.com](http://www.mmdequipment.com)

Phone: 800-433-1382

Fax: 800-225-5579